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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/383,210 | 08/26/1999 | ANDREAS HUBER | 98P5548 | 6304 |

7590 10/29/2002

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EXAMINER

CHERVINSKY, BORIS LEO

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
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2835

DATE MAILED: 10/29/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/383,210

Applicant(s)

HUBER ET AL.

Examiner

Boris L. Chervinsky

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-6 and 8-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1,2,4-6 and 8-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daszkowski in view of Saneinejad et al. or, alternatively, in view of Dolbear et al.

Daszkowski discloses a thermally conductive mat Fig. 4-7 having a sheet-like geometry, an underside of the mat is intended to be in contact with an outer wall of an appliance and a top side to be in contact with a heat generating device 34, the mat is comprised of a silicone elastomer or any elastomeric homogeneous or composite material (col. 6, lines 25-31), as claimed in claim 2 and its top side having a height-compensating structure of raised lamellae as claimed in claims 5 and 6.

Daszkowski discloses the claimed invention except the sticky surface. Saneinejad et al. and Dolbear et al. disclose thermal interfaces which may include sticky surfaces (see col. 3, lines 2-4 and col. 7, lines 24-26 respectively), besides it must be noted that any thermal interface pad including conventional epoxy based or acrylic based are sticky, at least at some point. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to have sticky surfaces as disclosed by Saneinejad et al. or Dolbear et al. for the thermal interface as disclosed by Daszkowski for convenience of installation. The disclosure of the instant application includes the list

of known materials on Page 3 lines 22-35, which produce the claimed properties and being used as mats. It also must be noted that the recitation in the claim that the material produces a sticky surface is functional and it is well settled that the presence of functional limitations in product claim in order to be given patentable weight must be supported by recitation in the claim of sufficient structure to warrant the presence of the functional language. *In re Fuller*, 1929 C.D. 172; 388 O.G. 279.

Regarding to claim 4, Daszkowski discloses the claimed invention but does not specify thickness to be at least 1 mm. Dolbear et al. discloses the thermal pad thickness more than 1 mm. (col. 3, lines 65-68). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to have thickness of the pad at least 1mm., as disclosed by Dolbear et al. for the pad disclosed by Daszkowski et al.

3. Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. in view of Saneinejad et al. or Dolbear et al.

Smith et al. discloses the housing 12 comprising wall parts, the circuit board 26 with electrical component 30 mounted on its surface and thermal mat 40 having thermally conductive adhesive layer 48, as claimed in claim 10, mounted between the circuit board and the wall part. Smith discloses the same invention except having a sticky surface of the thermal pad. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to have sticky surfaces as disclosed by Saneinejad et al. or Dolbear et al. for the thermal interface as disclosed by Daszkowski for convenience of installation.

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Regarding to Claim 11, Smith et al. discloses the claimed invention, as applied to claim 8 above, but does not have the housing made of metal. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the housing of metal since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Response to Arguments

Applicant's argument that the prior art does not show the homogeneous electrically insulating material that produces a sticky surface is not convincing since, as shown above, the specific properties claimed are disclosed by Dolbear et al. as well as by other references cited. Applicants consider materials produced by Kunze Folien are the materials that meet the limitations of the claimed invention (Page 3, lines 19-35). The thermally conductive pads produced by Kunze Folien are made of ceramic-filled silicone composite films that are adhesive on one or both sides, therefore in applicant's view these materials are homogeneous and having sticky surfaces. If Applicants claim the materials, which are different from the ones being disclosed in the prior Art, they fail to disclose and claim specific composition or formula of these materials to enable someone to make and use such materials.

Conclusion

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Boris L. Chervinsky whose telephone number is 703-308-5429. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren E. Schuberg can be reached on 703-308-4815. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-5115.

BORIS CHERVINSKY
PRIMARY EXAMINER



October 25, 2002